

FIG.1

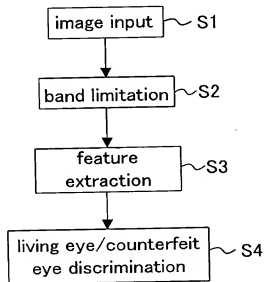
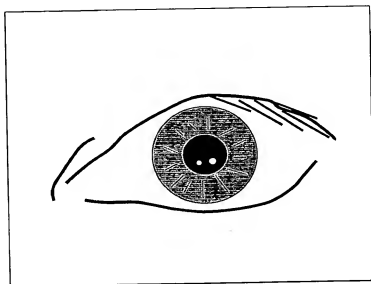
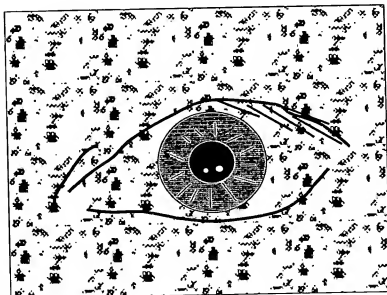


FIG.2



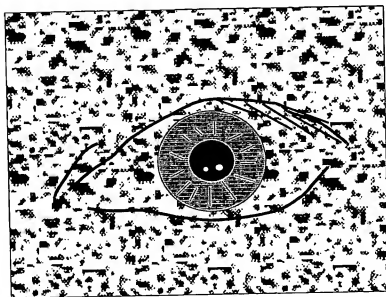
Living eye image

FIG.3



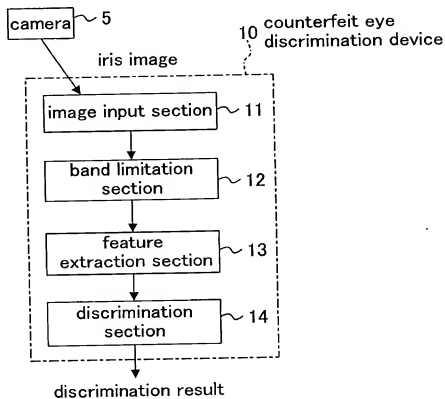
Counterfeit eye image (paper-type 1)

FIG.4



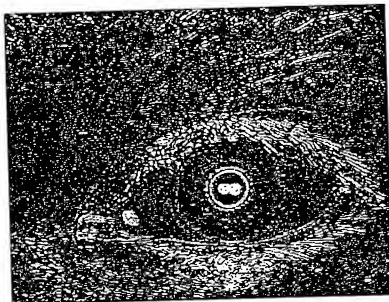
Counterfeit eye image (paper-type 2)

FIG.5



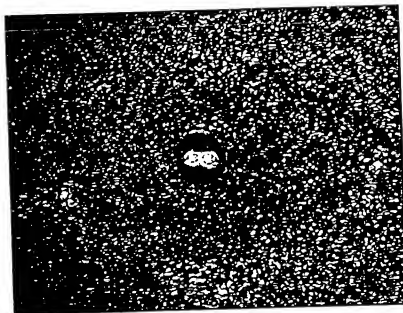
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FIG.6



Band-pass filtered output of living eye image

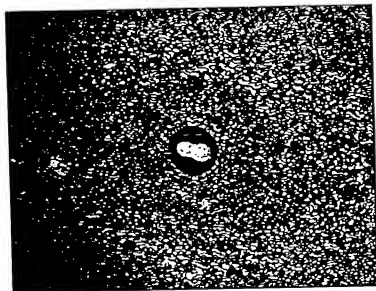
FIG.7



Band-pass filtered output of counterfeit eye image
(paper-type 1)

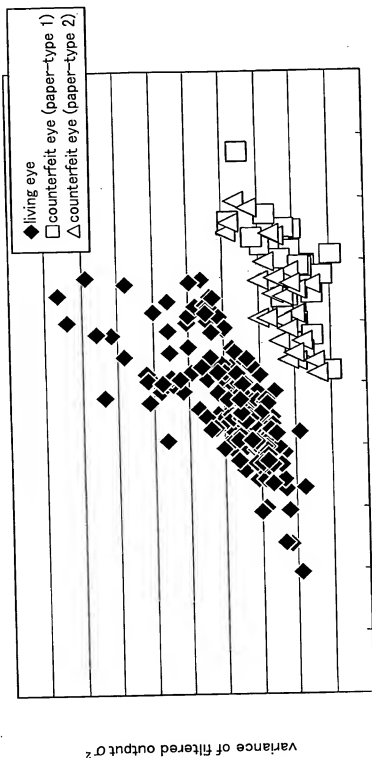
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FIG.8



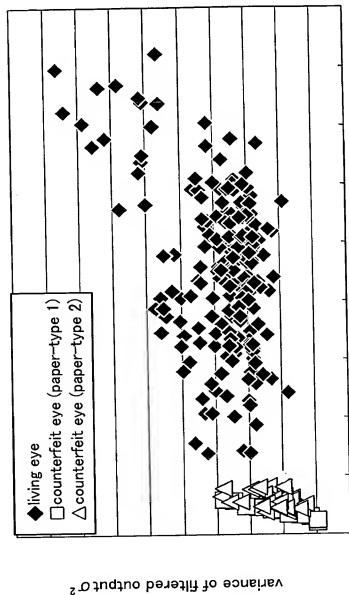
Band-pass filtered output of counterfeit eye image
(paper-type 2)

FIG. 9



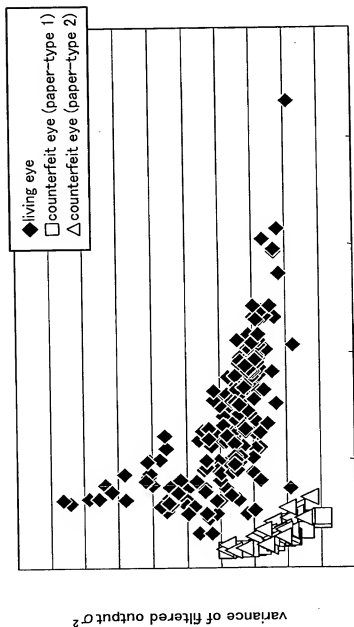
$$\text{variation around center of gravity} = \frac{\sum_{x,y \in A} \left\{ (x-x_g)^2 + (y-y_g)^2 \right\} I(x,y)}{\sum_{x,y \in A} I(x,y)^2}$$

FIG.10



$$\text{mean cube of filtered output} = \frac{\sum_{x,y \in A} I(x,y)^3}{N}$$

FIG.11

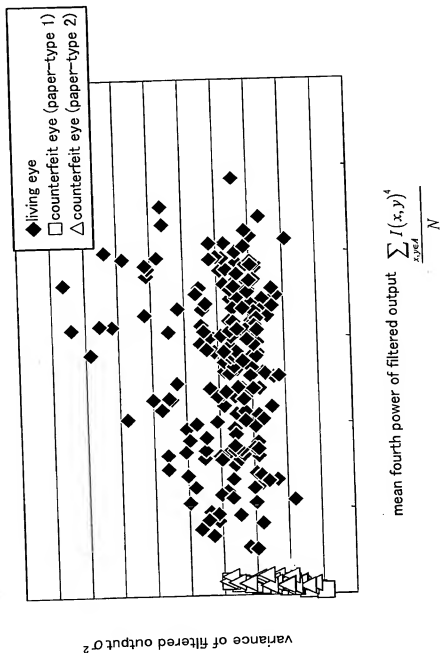


$$S = \frac{\sum_{x,y \in A} \left(f(x,y) - \overline{f(x,y)} \right)^3}{N \sigma^3}$$

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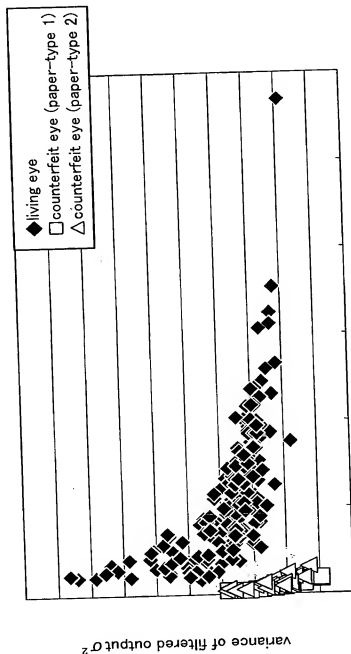
FIG. 12



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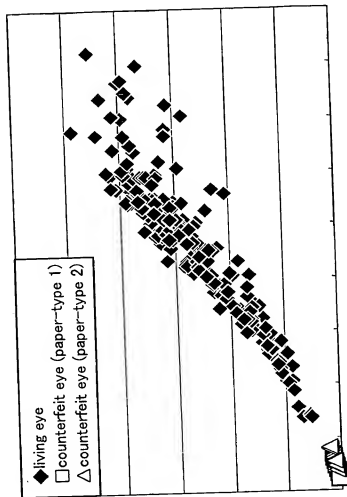
FIG.13



kurtosis of filtered output

$$K = \frac{\sum_{x,y} \left(I(x,y) - \overline{I(x,y)} \right)^4}{N \sigma^4} - 3$$

FIG.14



$$\frac{\sum_{x,y \in A} I(x,y)^4}{N}$$

mean fourth power of
filtered output

$$\frac{\sum_{x,y \in A} I(x,y)^3}{N}$$

mean cube of filtered output

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FIG.15

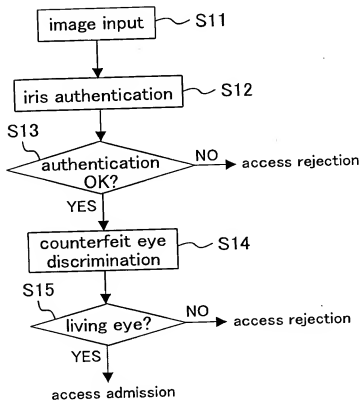
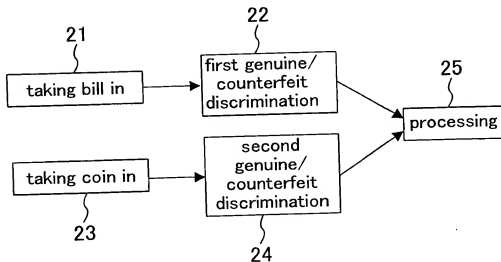


FIG.16



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